



# DM 3400/3401

## Numeric Display Mobile Radios



- 1 Accessory connector supports USB and enhanced audio capability.
- 2 Multi-colored LED indicators for clear, visible feedback of calling, scanning and monitoring.
- 3 Large, easy-to-use volume knob.
- 4 DM 3401 includes integrated GPS module.
- 5 Large, easy-to-use channel navigation buttons.
- 6 Powerful, front-projecting speaker.
- 7 32 channels; channel number is easy to read on large, clear numeric two-digit display.
- 8 Two programmable buttons for easy access to favourite features. New features such as one-touch calling are made even easier through programmable button access.
- 9 Compact and ergonomically friendly microphone.

### Numeric Display Mobile Radio Standard Package

- Radio with Numeric Display Control Head
- Trunnion
- Cabling (power cord)
- Compact Microphone
- Quick Reference Guide

### Additional Features

- Enhanced call management
  - Encode: emergency, push-to-talk ID
  - Decode: radio check, remote monitor, radio disable, all call
- DM 3401 can transmit GPS coordinates
- Dual-mode analogue/digital scan - facilitates a smooth migration from analogue to digital
- Send quick text messaging via programmable buttons

**MOTOTRBO™ System Components and Benefits**  
**DM 3400/3401** Numeric Display Mobile Radios

Specifications

**GENERAL SPECIFICATIONS**

Channel Capacity	32
Typical RF Output	
Low Power UHF1 and VHF	1-25 W
High Power UHF2 (450-512 MHz)	1-40 W
High Power UHF2 (512-527 MHz)	1-25 W
High Power UHF1	25-40 W
High Power VHF	25-45 W
Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Dimensions (HxWxL)	51 x 175 x 206 mm
Weight	1.8 kg
Current Drain:	
Standby	0.81 A max
Rx @ Rated Audio	2 A max
Transmit	1-25W: 11.0A max 1-40 W: 14.5A max (11.0A max < 25 W) 25-40 W: 14.5A max 25-45 W: 14.5A max

**RECEIVER**

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz/ 25 kHz
Frequency Stability	+/- 1.5 ppm (DM 3400) (-30° C, +60° C, +25° C)
Analogue Sensitivity	0.30 uV (12 dB SINAD) 0.22 uV (typical) (12 dB SINAD) 0.4 uV (20 dB SINAD)
Digital Sensitivity	5% BER: 0.3 uV
Intermodulation	70 dB
Adjacent Channel Selectivity	60 dB @ 12.5 kHz, 70 dB @ 20/25 kHz
Spurious Rejection	70 dB
Rated Audio	3 W (Internal) 7.5 W (External - 8 ohms) 13 W (External - 4 ohms)
Audio Distortion @ Rated Audio	3% (typical)
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Conducted Spurious Emission	-57 dBm

**MILITARY STANDARDS**

	810E		810F	
Applicable MIL-STD	Methods	Procedures	Methods	Procedures
Low Pressure	500.3	II	500.4	II
High Temperature	501.3	I/A, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.3	I/A, 1C3	503.4	I
Solar Radiation	505.3	I	505.4	I
Rain	506.3	I,II	506.4	I, III
Humidity	507.3	II	507.4	-
Salt Fog	509.3	I	509.4	I
Dust	510.3	I	510.4	I
Vibration	514.4	I/10, II/3	514.5	I/24
Shock	516.4	I, IV	516.5	I, IV

**TRANSMITTER**

Frequency	136-174 MHz (VHF) 403-470 MHz (UHF1) 450-512 MHz (UHF2)
Channel Spacing	12.5 kHz/ 20 kHz/ 25 kHz
Frequency Stability	+/- 1.5 ppm (DM 3400) (-30° C, +60° C, +25° C)
Power Output	+/- 0.5 ppm (DM 3401)
Low Power UHF1 and VHF	1-25 W
High Power UHF2 (450-512 MHz)	1-40 W
High Power UHF2 (512-527 MHz)	1-25 W
High Power UHF1	25-40 W
High Power VHF	25-45 W
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 4 kHz @ 20 kHz +/- 5.0 kHz @ 25 kHz
FM Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 20/25 kHz
Conducted / Radiated Emission	-36 dBm < 1 GHz -30 dBm > 1 GHz
Adjacent Channel Power	-60 dB @ 12.5 kHz -70 dB @ 20/25 kHz
Audio Response	+1, -3 dB
Audio Distortion	3%
Digital Vocoder Type	AMBE+2
Digital Protocol	ETSI-TS 102 361-1, 2 & 3

**GPS**

Accuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength)	
TTFF (Time To First Fix) Cold Start	< 1 minute
TTFF (Time To First Fix) Hot Start	< 10 seconds
Horizontal Accuracy	< 10 meters

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-30° C / +60° C
Storage Temperature	-40° C / +85° C
Temperature Shock	Per MIL-STD
Humidity	Per MIL-STD
Water and Dust Intrusion	IP54, MIL-STD

For more information please contact your local Motorola Authorised Dealer or Distributor



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DM3400/3401/SPEC-ENG(07/08)

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